Product Information Sheet

L477
Linsmaier & Skoog Modified Basal Medium pH Adjusted and Buffered

Synonym: Murashige & Skoog (MS) Medium with Minimal Organics (MSMO)

Properties

Form:	Powder
Appearance:	White to Yellow Powder
Application:	Plant Tissue Culture
Solubility:	Water
Typical Working Concentration:	5.53 g/L
Storage Temp:	2 – 6° C
Storage Temp of Stock Solution:	Preparation of concentrated solutions is not recommended as insoluble precipitates may form.
Other Notes:	Contains the macro- and micronutrients and vitamins as described by Linsmaier and Skoog (1965). pH = 5.25 – 6.25

Formula (mg/L)

Ammonium Nitrate	1650
Boric Acid	6.2
Calcium Chloride, Anhydrous	332.2
Cobalt Chloride•$6H_2O$	0.025
Cupric Sulfate•$5H_2O$	0.025
Na_2 EDTA•H_2O	37.26
Ferrous Sulfate•$7H_2O$	27.8
Magnesium Sulfate, Anhydrous	180.7
Manganese Sulfate•H_2O	16.9
Molybdic Acid (Sodium Salt)•$2H_2O$	0.25

Potassium Hydroxide	100
Potassium Iodide	0.83
Potassium Nitrate	1900
Potassium Phosphate, Monobasic	170
Zinc Sulfate•$7H_2O$	8.6
MES (Free Acid)	1000
myo-Inositol	100
Thiamine•HCl	0.4

Application Notes

Plant Tissue Culture Tested

This medium is the standard Murashige & Skoog (MS) basal salts supplemented with Linsmaier and Skoog vitamins. The medium is pH adjusted and buffered with MES. Under most circumstances, adjusting the pH is not necessary; simply add water and any desired PGR's, gelling agent, or other supplements. The addition of MES will help to stabilize pH fluctuations during media preparation and culture.

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References

Linsmaier, EM and F Skoog. 1965. Organic growth factor requirements of tobacco tissue culture. Physiol. Plant. 18:100-127.

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